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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/015,854 | 11/30/2001 | Americo Brajal | PHFR 000134 | 7602 |

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
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| EXAMINER | |
|---|---|
| FOX, JAMAL A | |
| **ART UNIT** | **PAPER NUMBER** |
| 2664 | |

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/015,854 | BRAJAL ET AL. | |
| | Examiner | Art Unit | |
| | Jamal A. Fox | 2664 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *20 October 2005*.

2a)☐ This action is FINAL. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 November 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 10/015,854.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Hamman (EP0926858).

Referring to claim 1, Hamman discloses a receiver (Figure 1 and respective portions of the spec.) for a packet transmission system of the TDMA type comprising at least a terminal suitable for transmitting, to the receiver, a packet of symbols (packet R symbols, [0009]), referred to as transmitted packet, in a time interval allocated in accordance with a predetermined (predetermined, [0003], [0005], [0006], [0009], [0011] and [0021]) allocation plan, said transmitted packet comprising a useful part and a known header (preamble Pr, [0003], [0005], [0006], [0007], [0010], [0011] and [0016]), the receiver comprising:

means for receiving (Figure 1, ref. sign 1 and respective portions of the spec.) a packet of symbols (packet R symbols, [0009]), referred to as received symbols, corresponding to the allocated time interval (interval of time, [0008], [0009] and [0018]),

oversampling (oversampling, [0020], [0025], [0028], [0030], [0036] and [0039]) means (microprocessor DSP, or a ASIC or programmable logical circuit, [0020]) for generating oversamples from a received symbol, and

means for recovering (Figure 1 ref. sign 8 and respective portions of the spec.) said transmitted packet for retrieving the position of the transmitted packet in the allocated time interval, comprising:

shifting means for selecting a variable computing window (window, [0018], [0025], [0027] and [0028]) in the allocated time interval,

means for searching (search, [0016] and [0033]) the optimal sampling instant for determining, on the basis of the generated oversamples, the optimal oversamples corresponding to the received symbols comprised in the current computing window,

means (Figure 1 ref. sign 4 and respective portions of the spec.) for successively correlating the optimal oversamples in the current computing window with the known header (preamble Pr, [0003], [0005], [0006], [0007], [0010], [0011] and [0016]) of the transmitted packet, and

decision means for detecting the presence and position (position, [0034]) of the transmitted packet in one of the computing windows as a function of the result of the successive correlations (correlation, [0006], [0007], [0011], [0013] and [0017]).

Referring to claim 2, Hamman discloses a receiver as claimed in claim 1, wherein the computing window comprises a plurality of symbols which is higher than the size of the transmitted packet, the difference in number of symbols being provided for mitigating an ambiguity related to the correlation (correlation, [0006], [0007], [0011], [0013] and [0017]) results.

Referring to claim 3, Hamman discloses a receiver as claimed in claim 2, wherein the optimal (optimal, [0006] and [0038]) sampling instant is searched on the basis of

received symbols situated at the end of the current window, except for the last symbols corresponding in number to said difference.

Referring to claim 4, Hamman discloses a receiver as claimed in claim 1, wherein the successive correlations (correlation, [0006], [0007], [0011], [0013] and [0017]) increment by at most one symbol (symbol, [0038]) between each correlation.

Referring to claim 5, Hamman discloses a packet transmission system of the TDMA type comprising at least a transmitter and a receiver (Figure 1 and respective portions of the spec.), the transmitter being suitable for transmitting to the receiver a packet of symbols (packet R symbols, [0009]) referred to as transmitted packet comprising a useful part and a known header (preamble Pr, [0003], [0005], [0006], [0007], [0010], [0011] and [0016]) in time intervals allocated in accordance with a predetermined (predetermined, [0003], [0005], [0006], [0009], [0011] and [0021]) allocation plan, the receiver comprising:

means for receiving (Figure 1, ref. sign 1 and respective portions of the spec.) a packet of symbols, referred to as received symbols, corresponding to the allocated time interval (interval of time, [0008], [0009] and [0018]),

oversampling (oversampling, [0020], [0025], [0028], [0030], [0036] and [0039]) means (microprocessor DSP, or a ASIC or programmable logical circuit, [0020]) for generating oversamples from a received symbol, and

means for recovering (Figure 1 ref. sign 8 and respective portions of the spec.) said transmitted packet for retrieving the position of the transmitted packet in the allocated time interval, comprising:

shifting means for selecting a variable computing window (window, [0018], [0025], [0027] and [0028]) in the allocated time interval, means for searching (search, [0016] and [0033]) the optimal sampling instant for determining, on the basis of the generated oversamples, the optimal (optimal, [0006] and [0038]) oversamples corresponding to the received symbols comprised in the current computing window,

means (Figure 1 ref. sign 4 and respective portions of the spec.) for successively correlating the optimal oversamples in the current computing window with the known header (preamble Pr, [0003], [0005], [0006], [0007], [0010], [0011] and [0016]) of the transmitted packet, and

decision means for detecting the presence and position (position, [0034]) of the transmitted packet in one of the computing windows as a function of the result of the successive correlations (correlation, [0006], [0007], [0011], [0013] and [0017]).

Referring to claim 6, Hamman discloses a receiving method for determining the position (position, [0034]) of a packet of symbols (packet R symbols, [0009]), referred to as transmitted packet, the system comprising useful data and a known header (preamble Pr, [0003], [0005], [0006], [0007], [0010], [0011] and [0016]) transmitted by terminal of a packet transmission system of the TDMA type within a time interval allocated in accordance with a predetermined (predetermined, [0003], [0005], [0006], [0009], [0011] and [0021]) allocation plan, the method comprising the steps of:

receiving (received, [0002] and [0005]) a packet, referred to as a received packet, corresponding to the allocated time interval and comprising symbols, referred to as received symbols, among which is the transmitted packet,

oversampling (oversampling, [0020], [0025], [0028], [0030], [0036] and [0039]) for generating oversamples from said received symbols,

shifting for selecting a variable computing window (window, [0018], [0025], [0027] and [0028]) in the received packet,

searching (search, [0016] and [0033]) the optimal sampling instant for selecting, on the basis of the generated oversamples, the optimal (optimal, [0006] and [0038]) oversamples corresponding to the received symbols comprised in the current window, and

successive correlations in the current window between the selected oversamples and the known header (preamble Pr, [0003], [0005], [0006], [0007], [0010], [0011] and [0016]) of the transmitted packet, and

decision for detecting the presence of the transmitted packet in a computing window and for deriving its position (position, [0034]) within the allocated time interval.

Referring to claim 7, Hamman discloses a method as claimed in claim 6, wherein the decision step effects a detection of the threshold for each correlation (correlation, [0006], [0007], [0011], [0013] and [0017]) result so as to derive the presence and position (position, [0034]) of the transmitted packet.

Referring to claim 8, Hamman discloses a method as claimed in claim 6, wherein the decision step effects a maximum (maximum, [0006], [0033] and [0034]) computation between all the results of the successive correlations (correlation, [0006], [0007], [0011], [0013] and [0017]) so as to derive the presence and position of the transmitted packet.

Referring to claim 9, Hamman discloses a computer program for a receiver (Figure 1 and respective portions of the spec.), the computer program comprising instructions which, once loaded into the receiver, enable it to perform the method as claimed in claim 6.

Referring to claim 10, Hamman discloses a signal (signal, [0009]) for transporting a computer program, the program comprising instructions for performing the method as claimed in claim 6, wherein said signal is embodied in a processor readable memory (memory, [0039]; memorized locally, [0011]).

***Conclusion***

3. **Any response to this action should be mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**or faxed to:**

(571) 273-8300, (for formal communications intended for entry)

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamal A. Fox whose telephone number is (571) 272-3143. The examiner can normally be reached on Monday-Friday 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to 2600 Customer Service whose telephone number is (571) 272-2600.

Jamal A. Fox

WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER